Once connected, press <*ENTER*> to bring up a command line prompt on the attached PC.

```
Management Options              iConverter, Serial Agent
Network Management
 1:  Chassis and Module Management
 2:  Set Module Name Preferences
Management Module Preferences
 3:  IP and Control Preferences
 4:  SNMP Preferences
 5:  Abandon Preference Changes
 6:  Save Preference Changes
 7:  Restore Factory Defaults
 8:  Restart Management Module
 9:  Other Networking Features
Management Module Maintenance
 10: Firmware Update
 11: Set Date/Time

IP Address  = 192.168.1.220
Chassis Number = 1

Enter Choice, <H>elp, E<x>it >
```

Figure E: Command Line Interface Menu Options

The CLI interface allows for the detailed configuration of the module. It is recommended to configure the module with an IP address associated with the attached network. Also, SNMP traphost address should be configured if the module is managed with an SNMP-based Management System. See the 10/100M2 User Manual for complete information.

4) VERIFY OPERATION

Once the module has been installed and configured per steps 1 - 3, verify the module is operational by viewing the LED indicators.

The Power LED indicates the modules is receiving power from the chassis.

The Fiber Optic link LED indicates the fiber optic connection has been established.

The UTP link LED indicates the module has established a connection across its UTP port.

LED Function "Legend"	Color	OFF State	ON / Blinking State
Power "Pwr"	Green	No power	Module has power
Power Supply Status "PSx"	Green	Power Supply not installed	ON: Power Available Blinking: No power available from "PSx"
Network Ports Status*			
Fiber Optics "FO"	Green	No Fiber Link	ON: Fiber link is active Blinking: Fiber Data Activity
Master/Slave "BP"	Green	Slave Mode	Master Mode
10Mbps UTP "10"	Green	10Mbps not selected or disconnected	ON: Active 10Mbps UTP link Blinking: UTP Data Activity
100Mbps UTP "100"	Green	100Mbps not selected or disconnected	ON: Active 100Mbps UTP link Blinking: UTP Data Activity
UTP Full-Duplex "FDX"	Green	Half-Duplex	Full-Duplex

Figure F: LED Indicators

Form 040-8900N-002 C 9/10

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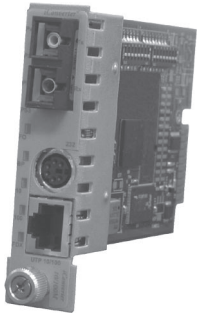
Omnitron Systems Technology, Inc.

iConverter 10/100M2 Plug-in Module QUICK START GUIDE



The *iConverter*®10/100M2 is a carrier-class media converter and a Network Interface Device (NID) that provides 10BASE-T or 100BASE-TX (10/100) to 100BASE-FX Fiber media conversion with integrated management.

The 10/100M2 has built-in Operation, Administration and Maintenance (OAM) functionality enabling the 10/100M2 to operate as a managed demarcation point at the customer premises and network edge, offering Quality of Service capabilities.

The 10/100M2 module can be managed using *NetOutlook*® SNMP Management Software, Telnet or the Command Line Interface (CLI).

For the complete User Manual on this product, access Omnitron's secure download site and request access.

http://www.omnitron-systems.com/login.php

INSTALLATION PROCEDURE

1) Configure DIP-Switches

2) Install Module in Chassis and Connect Cables

3) Configure Module via Command Line Interface

4) Verify Operation

1) CONFIGURE DIP-SWITCHES

DIP-SWITCH BANK 1

SW1 - UTP/FIBER PAUSE ENABLE

When this DIP-switch is in the Left "OFF" position, Pause is disabled. When the DIP-switch is in the Right "PAUS" position Pause is enabled.

When a port is configured for Auto-Negotiation (AN), Pause operation is determined during the negotiation process between itself and the link partner. The port advertises its Pause capability (Symmetrical or No Pause) based on the Pause Disable/Enable DIP-switch setting.

When a port is operating in Manual mode (MAN), its Pause operation mode is based on the Pause Disable/Enable DIP-switch setting.

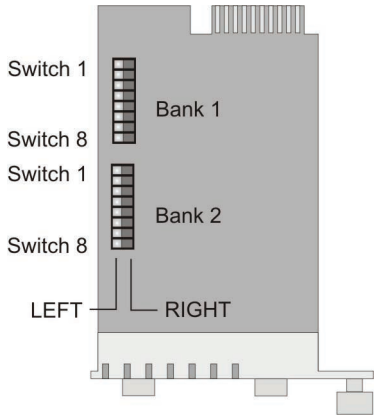


Figure A: DIP-Switch Locations

SW2 - FIBER FULL/HALF DUPLEX

Setting this DIP-switch to Half-Duplex "HDX" facilitates a connection that supports Half-Duplex. Setting this DIP-switch to Full-Duplex "FDX" facilitates a connection that supports Full-Duplex operation.

Switch	Left (Factory Default)	Right
SW1	**Off:** Pause Disable	**PAUS:** Pause Enable
SW2	**FDX:** Fiber Full-Duplex	**HDX:** Fiber Half-Duplex
SW3	**AN:** UTP Auto-Negotiate	**MAN:** UTP Manual
SW4	**100:** UTP 100Mbps	**10:** UTP 10Mbps
SW5	**FDX:** UTP Full-Duplex	**HDX:** UTP Half-Duplex
SW6	**See Link Mode Selection**	
SW7		
SW8		

SW6	SW7	SW8	Link Mode Selection
Left	Left	Left	**Link Segment (LS)** (Factory Default)
Right	Left	Left	**Link Propagate (LP)**
Left	Right	Left	**Remote Fault Detect + Link Segment (RFD + LS)**
Right	Right	Left	**Remote Fault Detect + Link Propagate (RFD + LP)**
Left	Left	Right	**Symmetrical Fault Detect (SFD)**
Right	Left	Right	**Asymmetrical Link Propagate Port 1 to Port 2 (ALP P1-P2)**
Left	Right	Right	**Asymmetrical Link Propagate Port 2 to Port 1 (ALP P2-P1)**
Right	Right	Right	**Asymmetrical RFD + LP**

Figure B: DIP-Switch Bank 1

SW3, SW4 AND SW5 - UTP CONTROL

DIP-switches SW3, SW4 and SW5 control the setting of the UTP port. See Figure C below for the UTP Configuration matrix.

NOTE: Refer to the table in Section 3.2.1.3 of the 10/100M2 User Manual for the more detailed information.

SW3	SW4	SW5	Function
AN	100	FDX	The UTP port is set to auto-negotiation with the following modes advertised: 100F, 100H, 10F, 10H
AN	100	HDX	The UTP port is set to auto-negotiation with the following modes advertised: 100H, 10F, 10H
AN	10	FDX	The UTP port is set to auto-negotiation with the following modes advertised: 10F, 10H
AN	10	HDX	The UTP port is set to auto-negotiation with the following modes advertised: 10H
MAN	100	FDX	The UTP port is set to manual negotiation and is forced to: 100F
MAN	100	HDX	The UTP port is set to manual negotiation and is forced to: 100H
MAN	10	FDX	The UTP port is set to manual negotiation and is forced to: 10F
MAN	10	HDX	The UTP port is set to manual negotiation and is forced to: 10H

Figure C: UTP Configuration Matrix

SW6, SW7, SW8 - LINK MODES

These three DIP-switches configure the link mode settings. It is recommended to have link modes DOWN (default) during the initial installation. After the circuit has been tested and operational, configure the module for the desire mode. For detailed information on the operation of the different Link Modes, download the application note "*iConverter* Link Modes" available on Omnitron's web site.

DIP-SWITCH BANK 2

SW1, SW2 - BACKPLANE ENABLE

When the DIP-switch is in the LEFT "DS" position (factory default), the Backplane Port of the 10/100M2 is isolated from the chassis' Ethernet Backplane. When the DIP-switch is in the RIGHT "EN" position, the Backplane Port is enabled. This allows Ethernet Backplane connectivity to an adjacent module via the chassis Backplane Link "A" or "B" depending on the switch setting.

Switch	Left (Factory Default)	Right
SW1	**A-DS:** Disabled Backplane Port A	**A-EN:** Enabled Backplane Port A
SW2	**B-DS:** Disabled Backplane Port B	**B-EN:** Enabled Backplane Port B
SW3	**Reserved**	**Reserved**
SW4	**M/SL:** Master/Slave Auto-Select	**SL:** Slave-Mode Only
SW5 - SW8	Reserved	Reserved

Figure D: DIP-Switch Bank 2

SW4 - MASTER/SLAVE

When the 10/100M2 module is installed in a chassis with an Network Management Module (NMM2), set the DIP-switch to the LEFT "M/SL" position (factory default). The assignment of mastership is automatically negotiated by the installed management modules. To designate the 10/100M2 module as the master of the chassis, set the DIP-switch on the module to the LEFT "M/SL" position, and set the other installed management modules' DIP-switches to the RIGHT "SL" position to enable Slave-Only mode.

2) INSTALL MODULE IN CHASSIS AND CONNECT CABLES

a. Carefully slide the module into an open slot in the chassis. Align the module with the installation guides and ensure that the module is firmly seated against the backplane. Secure the module by fastening the front panel thumbscrew (push in and turn clockwise to tighten) to the chassis front. Verify the "Pwr" LED is ON (indicating the chassis is powered).

b. When using a 10/100M2 SFP model (8919N-0), insert the SFP Fiber transceiver into the Port 1 SFP receptacle on the 10/100M2.

   NOTE: The release latch of the SFP Fiber transceiver must be in the closed position before insertion.

c. Connect an appropriate multimode or single-mode fiber cable to the fiber port of the installed module. It is important to ensure that the transmit (TX) is attached to the receive side of the device at the other end and the receive (RX) is attached to the transmit side. Single-fiber (SF) media converter models operate in pairs. The TX wavelength must match the RX wavelength at the other end and the RX wavelength must match the TX wavelength at the other end.

d. Connect the UTP port via a Category 5 cable to a 10BASE-T or 100BASE-TX Ethernet device.

3) CONFIGURE MODULE VIA COMMAND LINE INTERFACE

To access the Command Line Interface (CLI), connect the 10/100M2 RS-232 Console Port to the COM port of a computer equipped with terminal emulation software such as HyperTerminal. The Console Port (DCE) is a mini DIN-6 female connector which can be changed to a DB-9 connector with the included adapter. The 10/100M2 Console Port is a standard asynchronous serial interface.

Start HyperTerminal and select the correct COM Port in the HyperTerminal "Connect To:" window. Set the serial port to the following:

Bits Per Second	57,600
Stop Bits	1
Data Bits	8
Parity	NONE
Hardware Flow Control	NONE